Hobbies WEEKLY

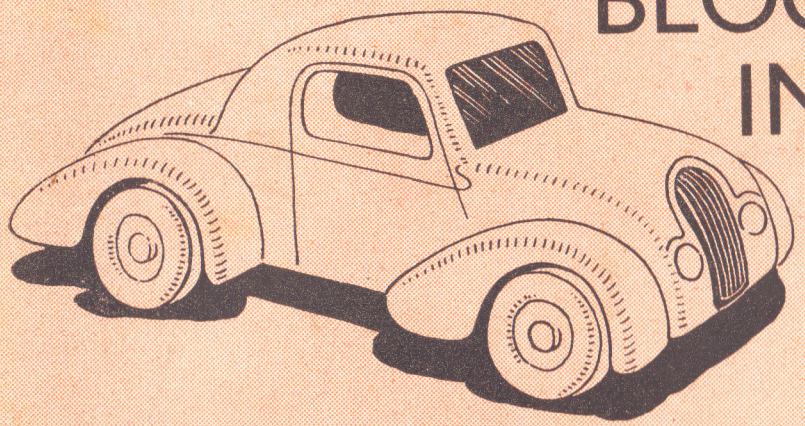
CONTENTS



March 28th, 1951 Price Fourpence Vol. III No. 2891

## HOW TO MAKE SMALL

# BLOCK TOYS IN WOOD



HERE is a suggestion for our fretwork enthusiasts who have small children with birthdays during the summer months. Simple cars are made up in block form so that they are easily assembled and painted. The shapes are designed to represent the real thing, without a great deal of intricate cutting or the addition of a lot of details.

These sturdy little toys are really intended for rough usage, and they are highly suitable, therefore, for the youngsters to pull about in the garden.

If you will turn to page 415 you will see three complete outlines—a saloon car, a tradesman's van and a two-seater coupé. The positions of the mudguards are dotted on in each case, and you will also notice that the same mudguards are suitable for each of the three designs. When marking the shapes on to wood remember that the grain of the wood must run in the direction shown by the arrows.

### Cutting Out the Parts

The wood suggested is odd ½in. stuff. The body of each car is made up of three pieces as shown in Fig. 1. The car we have chosen as an example is the two-seater, and the shape is carefully traced on to the wood three times. Two pieces will have the window openings cut out and the third piece can be solid for the sake of strength.

Full size patterns on page 415

These three pieces are glued together and placed under a weight for a time until the glue has hardened. The mudguards are also cut from ½in. wood. We suggest that a template be cut from card for each mudguard, and then any number can be very quickly marked on to the wood. Do not forget to keep the pencil sharp during this operation. Fig. 2 shows the mudguards being glued in place. The construction of all three vehicles is exactly the same.

### Shaping

The next step is to round off all the edges to give a more streamlined appearance. This can best be done with a small rasp, but a sharp penknife will do almost as well. Having roughly rounded the edges you can now clean them up thoroughly with glasspaper. Fig. 3 shows how the body and mudguards will look after shaping.

### Painting

First give one coat of flat undercoating and then apply two thin coats of glossy enamel. The colours will, naturally, be bright; say, red or bright

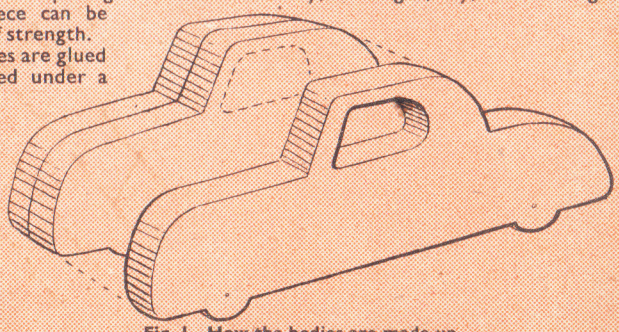


Fig. 1—How the bodies are made up

blue, and you could also introduce two shades of the same colour on each vehicle. Allow each coat to dry thoroughly before applying the next. This is absolutely essential with toys that are handled frequently.

The inside of the side windows and the windscreen can be painted black, while the radiator could be black with silver lines marked on. If you wish to add further detail you could paint on the door handles and headlamps. Alternatively, the headlamps could be small circles of card cut out with scissors. Do not add too much detail, however, or the character of the cars will be destroyed. They are not intended to be models but merely sturdy toys.

### The Wheels

To save expense the wheels could be cut from ½in. wood and the edges rounded off with a rasp. Many workers, however, are not keen on cutting their own wheels because of the difficulty in getting them perfectly round. Suitable bakelite wheels, 1¼ins. diameter, are supplied by Hobbies Ltd. and cost 9d. per set of four. Postage and packing is, of course, extra. This will amount to 2½d. per set.

Since the body is quite solid we suggest that you use fairly long screws—about 1in.—which will hold the wheels securely in place. (403)

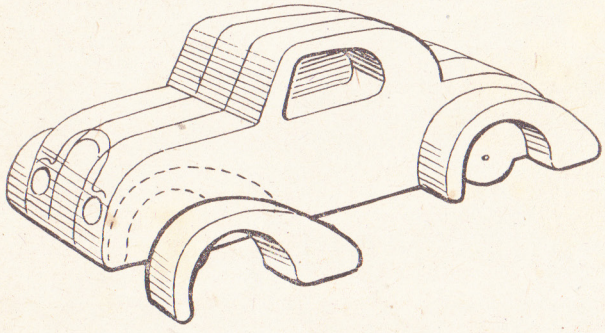


Fig. 2—Mudguards being glued into place

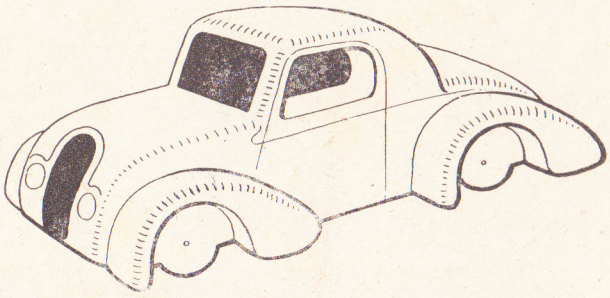
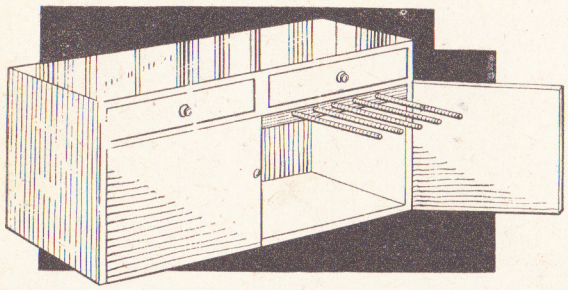


Fig. 3—How body and mudguards look after shaping



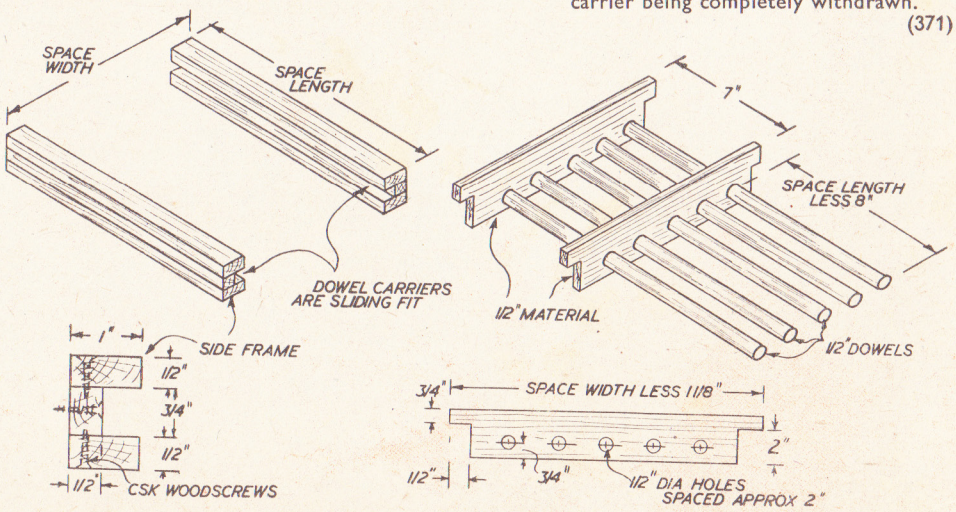
# A Sliding Towel Rack

THIS useful fitment can be proportioned to fit any size of kitchen cabinet, choosing the dimensions to suit the space available. Towels or drying cloths are hung on the dowel arms, the whole unit capable of being pulled out or pushed in, as required. Towels or cloths stored in this way air better and dry quicker, and with the door shut everything is out of sight.

Construction is simple. One or both 'door spaces' of the cabinet can be used. Two lengths of channel are built up, as shown, exactly to fit the length of the available space inside the cabinet. 1in. by ½in. and ¾in. by ½in. stock is used for this, screwed and glued together and also screwed in place. Use countersunk woodscrews throughout.

Into these two channels fit the dowel carriers. These are identical, cut from ½in. material. The end is tongued to fit the grooves in the fixed channel sections with ⅛in. clearance for smooth operation. From the bottom of each of these carriers mark off a line ¾in. and punch centre holes at approximately 2in. spacing. Drill ½in. to take the dowels. The assembly of this unit is obvious from the diagram. The dowels should all be glued in place.

The length of the dowels must be arranged so that there is adequate clearance for the door to close with the rack fully closed. A spacing of about 7ins. between the two carriers provides a stable support. A suitable stop can be fitted at the extreme outer edge of each channel section to prevent the whole carrier being completely withdrawn. (371)




Showing construction of channels and dowel carriers

## Hints for the handyman-gardener on

# LAWNS AND THEIR MAKING

IT generally falls to the lot of the home handyman to tend the household lawns, and now is the time when these attractive features of domestic life should receive attention.

If you do not possess a lawn but are desirous of making one, it is much better to prepare the ground and set seed than lay sods taken from elsewhere. Sods seldom 'root' consistently, and it is difficult to get them to present a perfectly flat surface, for if the underlying ground is hard they will not catch on, while when it is soft the turfs sink, causing uneven depressions.

Before setting seed, the ground should be dug for about 1ft. in depth. Large lumps must be completely broken down and all stones and weeds removed. Sowing is best in showery weather, although with a hose the ground can be artificially moistened. Never attempt the sowing at very dry, windy times as grass seed is light and easily blows away. In any case, high wind makes even distribution—which is essential—almost impossible.

### Peg Out the Ground

About 1oz. to 2ozs. of seed must be used for every square yard of ground and it is really a good idea to peg the area out with strings to ensure that equal distribution is being obtained.

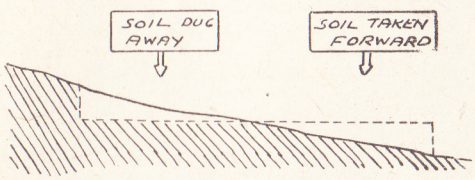



Fig. 3—Levelling a sloping lawn

To prevent ruining the prepared ground, perform the sowing standing on a plank to distribute your weight, and when the seed is down, cover only with the finest layer of soil, otherwise germination may not take place. Actually, grass seed need be no more than ¼in. below the surface and it will be found that this thin covering can be secured by raking gently in two opposing directions.

### Use a Light Roller

When the new shoots are about 1in. high, a very light roller can be used with advantage over the surface, but no cutting should be attempted till shoots are in the neighbourhood of 2ins. Up to this period the new lawn must be kept under continual observation, and weeds or coarse blades that may appear must be ruthlessly pulled out. Any stones that were missed in the first preparation should also be removed—in fact get rid of anything that looks as though it might be going to cause an inequality in the final sward. All this can be done without causing damage to the ground if you always work from the weight-distributing plank.

### The Use of Turf

If for some special reason you are desirous of laying your new lawn with turves, the main thing is to get these as large as possible (little bits of grass are useless) and cut with perfectly straight edges so that each will sit tight up to its neighbour. A handy size of turf is 3ft. by 1ft.

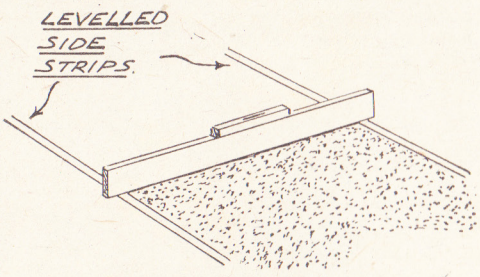
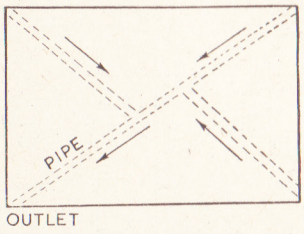



Fig. 1—Levelling a new lawn

Once laid, the area should be given a tamping with a wooden 'beater' of some considerable area. This will ensure everything being as flat as possible, but, as pointed out, a perfectly even surface with loose sods is not easy to obtain unless the condition of the new rectangles and undersoil is ideal. Once laid, the turves should be kept freely watered until they root.



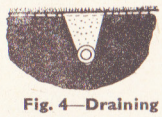



Fig. 4—Draining

The laying of turves for a new lawn, although it is not the best method, has some advantages. The lawn is rough-finished from the start, and if you are able to get your own turves in the country instead of buying, it is not so costly as seed-setting.

In the preparation of any ground for lawn-making, the question of levelling is of the utmost importance, while drainage should not be overlooked. One of the best ways of levelling with loose soil is to use a long plank on edge, as roadmen do when laying a concrete surface. Two persons, if possible, should work the length, which is taken slowly forward from end to end of the area being prepared, pushing unwanted soil before it. With this straight-edge depressions are easily detected and can be filled up with surplus soil from other parts.

### Make Side Strips

For very accurate use of this method, two levelled-up side strips should be put down (as shown in Fig. 1) along which the ends of the plank can slide. It is good, too, to have a spirit level temporarily fixed to the top edge of the wood at the mid point for continual reference.

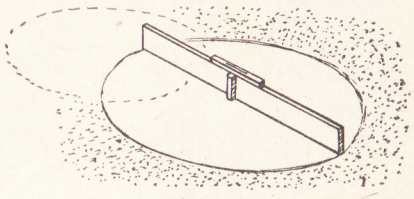


Fig. 2—The rotating plank method

Some lawns, by the very nature of the land, have to slope, and then this plank method cannot be used in its entirety, but it is generally possible to get a horizontal line in one direction, and this should be aimed for.

Another way to get a level surface with a long plank is to put a strong pivot of wood in the centre, sink this in and then rotate the length as in Fig. 2, which gives a complete circle of flatness. When one circle is finished the plank is moved on to an overlapping area, and so on till the whole area is completely traversed—the holes made by the pivot being carefully filled.

### The Sloping Lawn

In the case of a sloping lawn that you wish to level, this can be effected (see Fig. 3) by working from a centre line, digging out the ground from the raised portion and carrying it forward to the depressed end—allowing for sinkage here.

Excessive moisture in a lawn is bad as it makes for heaviness and mud. Grass flourishes best in firm but porous, airy soil. Drainage can be effected in bad cases by using the standard agricultural drainpipe. These are bought in quite small sections 12ins. long by 3ins. diameter, and are laid 12ins. to 18ins. below the ground, and sloping at 1in. in every 10ft. to some point where the water coming into the pipe-line formed can readily drain away. It is no good having nowhere for the water to go.

Agricultural drain pipes are not

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# Any youngster would be pleased to have this
# USEFUL PENCIL BOX

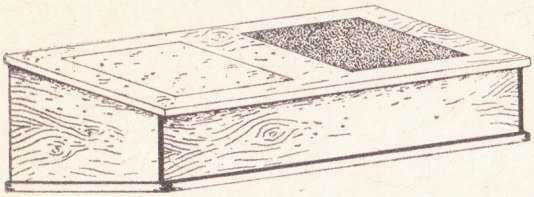

Fig. 1—The completed box

THE pencil box indicated in Fig. 1, and the same box with cover removed in Fig. 2, is just the thing to make either for yourself, or for your young brother or sister. The box lid is provided with a piece of emery cloth on which the pencil can be sharpened, as indicated in Fig. 2.

Also a piece of blotting paper is fixed on the lid which is useful for cleaning the pen nib, or rubbing the pencil point over to clean off any powdered lead after sharpening on the emery cloth. The box is quite simple to make from good sound pieces of $\frac{3}{16}$in. plywood, and all the parts are fixed together with glue.

one of each on the sides $\frac{3}{16}$in. from the edges, as clearly shown in (A) Fig. 3. The back is indicated in (B) Fig. 3, and consists of a piece of plywood 7$\frac{1}{2}$ins. long by 2$\frac{1}{2}$ins. wide.

The top edge of this piece is tapered off to the slope of the side pieces, and this is easily done with a file and glasspaper.

### The Front

The front for the box is simply a piece of plywood cut 7$\frac{1}{2}$ins. long by 1$\frac{1}{2}$ins. wide, as indicated in (C) Fig. 3. The parts thus cut are well smoothed up with glasspaper, and then fixed together with glue and allowed to set hard, after which all surplus glue showing can be carefully scraped off.

### The Bottom

The bottom for the box is indicated in (D) Fig. 4, and simply consists of a piece of plywood cut carefully to size 8$\frac{1}{8}$ins. by 3$\frac{1}{4}$ins. Well smooth up the piece when cut, and glue it in position with an overlap of the edges $\frac{1}{8}$in. all round.

Details of the box lid top are given in (E) and (F) Fig. 4. Cut a piece of plywood

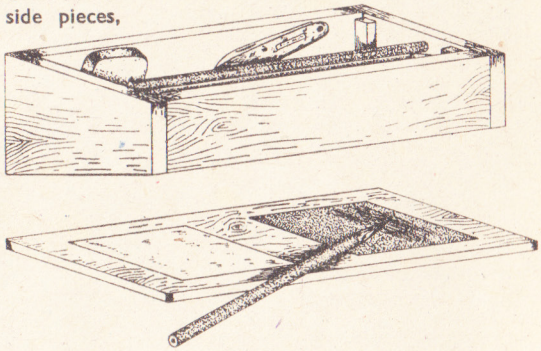

Fig. 2—The box with the lid off

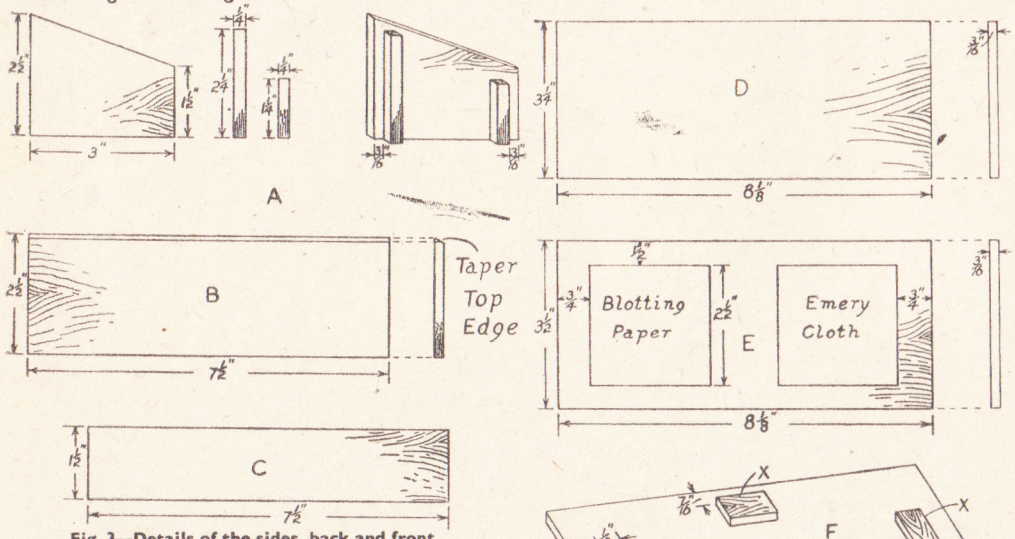


Fig. 3—Details of the sides, back and front

Fig. 4—Dimensions for the top and bottom

Commence on the sides, details of which are given in (A) Fig. 3. Cut two pieces 3ins. long by 2$\frac{1}{2}$ins., tapering the top edge down to 1$\frac{1}{2}$ins., as clearly indicated. Cut two pieces 2$\frac{1}{4}$ins. by $\frac{1}{4}$in., and two pieces 1$\frac{1}{4}$ins. by $\frac{1}{4}$in., and glue 8$\frac{1}{8}$ins. by 3$\frac{1}{2}$ins., as indicated in (E) Fig. 4, and the positions of the blotting paper and emery cloth are also indicated. The blotting paper and emery cloth are fixed by a little glue applied along the edges.

Next cut four pieces of plywood 1in. by $\frac{1}{2}$in., and carefully glue them on the underside of the lid, in the positions shown in (F) Fig. 4. The edges of the pieces marked (X) in view (F) Fig. 4, are carefully filed until the lid fits nicely in position on the box top.

The box can now be finished off by applying a coat of stain. (376)

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**Lawns and Their Making**—(*Continued from page* 403)

cemented together, but merely laid end to end, and the trench in which they lie must be filled with light soil, not heavy impervious clay. With small lawns one pipe taken diagonally across with a branch to each corner will generally do all that is required (Fig. 4). Bigger lawns need more considered treatment.

Where a lawn is already in existence, the best way to get it into trim is by the consistent use of a *good* mowing machine—if possible with roller attached. Mounds can be removed by turning back the turf, digging out the unwanted soil and replacing the turf. Small hollows are best filled by continual dusting with sand till the desired level is reached—the turf not being disturbed.

Worms are sometimes a real nuisance as they keep the ground too loose and throw up unsightly casts. The trouble can be well dealt with in Spring by the use of a worm killer, as February to the end of May is a breeding season. (402)

Here is some helpful advice on

# BRICKLAYING FOR BEGINNERS

THE building of a low wall is well within the scope of the average handyman provided his effort is guided along the right lines. Such a wall can be put to many uses, decorative and otherwise, especially in the garden.

### The First Step

Mark out the position of the wall and dig a trench 12ins. deep, 15ins. wide and, if possible, about 1ft. longer than the intended length of the wall. Ram the bottom of the trench until it is hard and firm. On to this will go a 4in. layer of concrete.

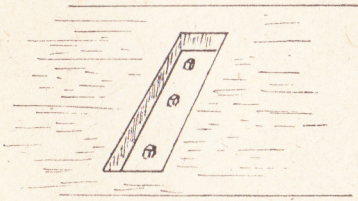


Fig. 1—The foundation trench

Along the middle of the trench drive in wooden pegs 3ft. apart, leaving 4ins. of each peg above the ground (Fig. 1). Put a piece of deal boarding across the first two pegs and test with a spirit level. In this way adjust the pegs all along the trench so that their tops are all perfectly level.

### Mixing the Concrete

A suitable mixture is:

1 bucketful of cement.
2 bucketfuls of clean sharp sand.
3 bucketfuls of gravel.

Use a wooden or stone base for the mixing. First tip the gravel into a heap. Over this put the sand and finally, the cement. The easiest way to do the mixing is to shovel the heap over into another heap and then shovel it back again. Keep this up until the mixing is complete.

Now sprinkle with water from a watering can and repeat the mixing process until there are no dry 'pockets' of material left in the heap.

Tip the cement mixture into the trench and use a piece of boarding to level it off flush with the tops of the wooden pegs.

### Making Cement Mortar for the Wall

Cement mortar is preferable to lime mortar in that it is easier to mix and cleaner to use.

The mixture:

1 part cement.
5 parts clean sharp sand.

Mix in the same way as for the foundation concrete until the whole mass is the consistency of cream.

### Laying the Foundation Course

The foundation course is the layer of bricks placed immediately on to the concrete base. In this particular case the course is one brick wide and one brick high. Spread a ½in. thickness of mortar on the concrete base and on this lay the bricks *crossways* to the run of the wall (Fig. 2). Such bricks are called 'headers'. Those running in the same direction as the length of the wall are called 'stretchers'.

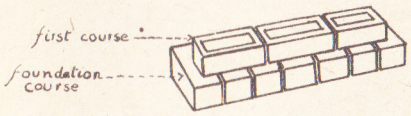



Fig. 2—The foundation and first courses

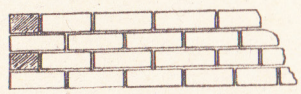



Fig. 3—Essential arrangement

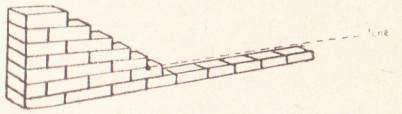


Fig. 4—Ends of wall built first

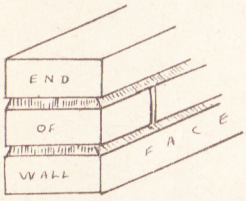



Fig. 5—Pointing the joints

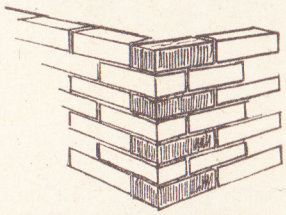


Fig. 6—Building up a corner

Use a straight edge and spirit level to level up the foundation course and, where necessary, use the handle of the trowel to tap the bricks into place. Now test the face of the bricks with the straight edge so that the whole course is squared up.

### The Wall Itself

Fig. 3 shows the essential arrangement; each brick overlaps the joint immediately above and below it. This overlapping is a 'stretching bond' or a 'chimney bond'.

To do this start all odd numbered courses with a whole brick and all even numbered courses with a half-brick.

The layer of mortar between each course, and the dab of mortar at the end of each brick should be a ½in. thick. Wet the bricks beforehand to make a strong union. Firstly build the ends of the wall up to six courses, and then work to the middle of the wall (Fig. 4).

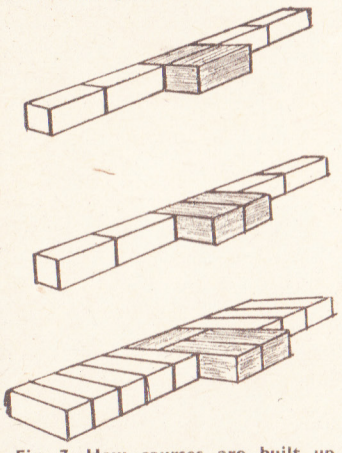


Fig. 7—How courses are built up when strengthening a wall with piers

### Cutting Bricks in Half

To cut a brick in half use a broad chisel called a bolster. Scratch the brick on each side. Place the chisel on the scratch on each side in turn and give it a blow with a hammer. A heavy blow with the hammer will now break the brick in half. These half bricks are called brickbats.

### Building Up the Wall

Fasten a length of string to two nails, or better still, use proper bricklayer's 'pins'. Push the nails into a mortar joint so that the line is taut and at the level of the first course (Fig. 4). This course is now completed and the line moved up to the level of the next one.

When the sixth course has been completed start on the ends again. Build them up to the required height (ten to twelve courses) and then build up the middle portion again.

### Pointing the Joints

Where the face of a wall is exposed to the weather it must be treated so that water cannot lodge in the joints.

Put the trowel flat against the top of a joint, pressing the mortar in at the top and flush with the brick at the bottom. Fig. 5 shows the final effect.

Where a face is not so exposed the joints are given a flush finish. The mortar is pressed tightly into the joint and the surplus scraped off level with the bricks.

This type of wall can be used for the building of a coal-bunker and so on. Fig. 6 clearly shows how the corners are made.

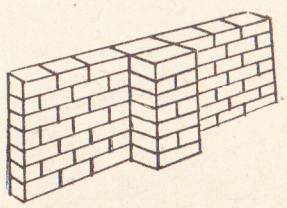


Fig. 8—A completed pier

### Building a Higher Wall

If this type of half-brick wall is to be built higher than ten to twelve courses, it must be strengthened by means of piers built at regular intervals along its length.

This time the base is made of a 6in. depth of concrete and the trench must be widened wherever a pier is to be built. Fig. 7 shows the arrangement of the bricks for the foundation courses and for the odd and even numbered courses. The completed pier is shown in Fig. 8.

### The 9in. Wall

Dig the trench 30ins. wide and lay a 6in. layer of concrete.

First foundation course—two bricks wide (Fig. 9).

Second foundation course—a brick and a half wide (Fig. 10).

First course and all odd numbers—Fig. 11.

The shaded brick is only 2¼ins. wide and is called a 'closer'. The closers are used to make the headers fall across the joints between the stretchers.

Second course and all even numbers—Fig. 12.

The finished wall is illustrated in Fig. 13.

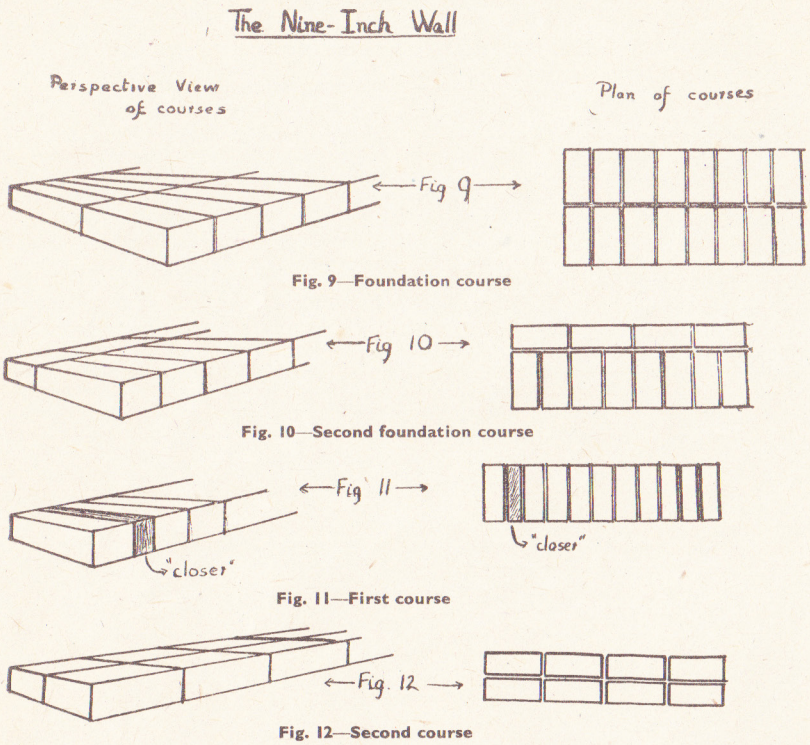



Fig. 9—Foundation course

Fig. 10—Second foundation course

Fig. 11—First course

Fig. 12—Second course

### The Plumb Rule

The plumb rule is used to make sure that the ends and the face of the wall are vertical.

The easiest way is to hold the rule against the bricks with the left foot and left hand. With the trowel handle tap in protruding bricks until the metal bob hangs exactly in the centre of the hole and the cord lies just in front of the groove. (382)

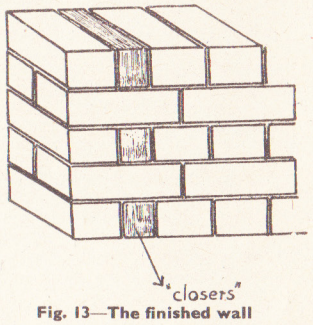


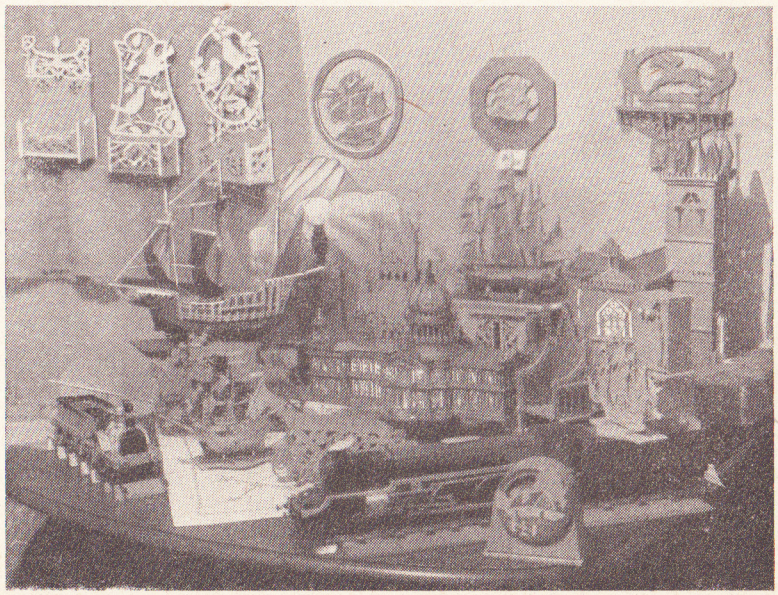

Fig. 13—The finished wall

# The Work of a Craftsman

*FROM Mr. T. Smith, of 7 Station Avenue, Eastfield Estate, Bolton (Lancs.) comes this picture of 24 of the models he has made during the past few years — mostly from Hobbies patterns.*

*Among them we notice a model of St. Paul's, The Coronation Chair, the ½d. Galleon, the Santa Maria, two locos — the Gt. Northern Pacific type nearest camera, and the old-timer 'North Star' on the left—a stage coach, and numerous of our fretwork designs.*

*Mr. Smith has certainly been busy, but he has something to show for his labours. And something to be proud of, too, for, as far as we can see from the photograph, the models are extremely well made.*



You should find it easy to make this

# BEDSIDE LAMP AND CLOCK

A CLOCK in the bedroom is really only partly fulfilling its purpose if there is no light in a handy position for seeing it. It is generally during the dark hours that we want to refer to it and then a light of some sort is essential.

The subject of this article is a combined bedside reading lamp and clock that fulfils these requirements. It is quite an attractive piece of furniture designed on modern lines and should find a ready appeal.

The switch mounted on the baseboard in front of the clock makes operation quite simple. It is well within reach when lying in bed and the clock is adjustable to any angle.

The lamp has been designed to work off the mains but it could be easily adapted for use with batteries if desired.

### Which Wood

The choice of wood is rather important, and a hardwood such as oak or walnut is to be preferred. Even if the woodwork is to be painted with one of the modern lacquer finishes a hardwood should be used if possible.

Three separate pieces of wood make up the base and have a total thickness of 1in. The top one, which is 8ins. long, 5ins. wide and ¼in. thick could be made of plywood but a solid piece of wood would look better. For the middle section cut a piece 8½ins. long, 5½ins. wide and ½in. thick, and this could be cut with the grain across the width to give variation to the design. This centre section has a 4in. square hole cut in the centre to allow room for the switch and all the necessary wiring.

Cut a piece of ¼in. thick wood 9ins. long and 6ins. wide for the third section which is screwed in position when the wiring has been connected up.

Next cut the two supporting bars from wood 1in. square. Allowing for the piece let into the baseboard ⅜in. and into the top bar ½in., the total length will be 6¼ins. Cut two square holes right through the top two sections of the baseboard to just fit these supports—there must be a clear space of 5ins. between them.

One of the supporting bars is hollowed out for the wiring to pass down, and the best way of doing this is to use two pieces of ½in. wood for this side instead of one square piece. Cut the grooves large enough to take twin flex and then glue together.

### The Clock Panel

Before we can fix the supports into position the clock panel must be made. It consists of a piece of wood 5ins. long, 4ins. wide and ⅜in. thick, and in the centre a hole is cut of sufficient size to fit the clock. No definite information can be given regarding this, as it entirely depends on the clock used and must be left to the reader's discretion.

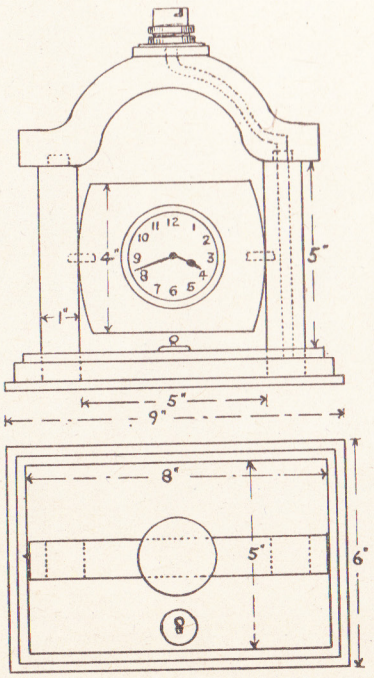
This bedside combination was designed to take the popular little timepiece now made with dials of such diverse shapes and sizes. The movement behind the dial is contained in a drum having a diameter of about 2¼ins. and this is the size to be cut out of the panel. A fairly tight fit is usually sufficient to hold the clock in position, but you must use your own discretion regarding the fixing.

It may be that you already possess a clock mounted in a wood panel that can be cut to the necessary size to fit between the supporting bars. Another idea is for the clock panel to have a slight sink cut in the centre to fit a pocket watch, which is suspended on a neat little hook.

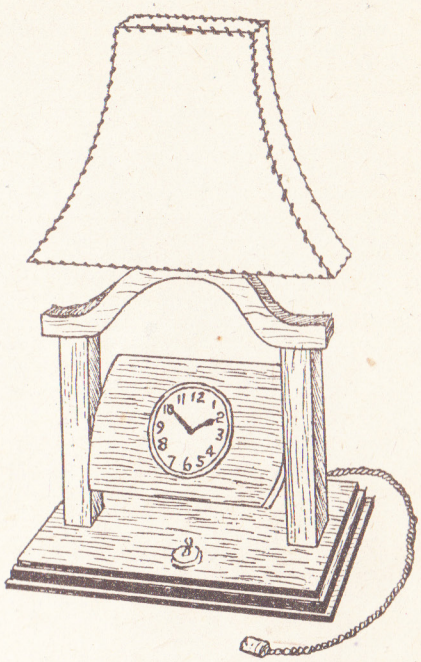
Two pivots must now be fitted to the clock panel in order to make it adjustable to any angle. In the centre of each end drill a hole about ⅜in. deep to take a length of ¼in. dowel rod. Make it a fairly tight fit and glue in position, leaving a piece projecting about ¼in.

The two supports have holes drilled to receive these dowel pivots 2½ins. up from the baseboard. Make them a movable fit, but at the same time they must be fairly tight, or the clock may swing over by itself.

Now is the time to fit the clock panel into the supports and then glue these firmly into the baseboard. At the same time the two top sections of the baseboard can be glued together.




General dimensions



### The Top Bar

The curved top bar which supports the electric light holder can now be cut and fitted to the side bars. Like one of the side bars it is best made in two halves, so that a groove may be cut to take the flex from the holder.

A piece of wood 8ins. long, 3ins. wide and ½in. thick will cut one side, then lay it on another piece of wood and cut a similar piece. Cut a mortise in each end to fit the tenons on the side supports before cutting out the grooves for the wires. Quite shallow grooves will be sufficient to take the flex, and this must be placed in position before fastening the two halves together with glue.

Cut a block of wood 2ins. diameter and ⅜in. thick and glue to the centre of the top to screw the lamp holder on to. Drill a ½in. hole in the centre for the wires to come through.

Before the final finishing, mark and cut the hole for the switch. A small tumbler switch of the wireless type capable of carrying a current of 3 amps. will do nicely.

Glasspaper all quite smooth and finish either with french polish or one of the modern lacquers chosen to match the existing furnishings.

Take a little time and care over wiring up and leave no loose strands of flex when connecting to the holder and switch, especially if you are going to work off the mains.

(*Continued foot of page 410*)

## An interesting hobby

# FOR CYCLIST AND HIKER

WHEN out cycling or hiking there is no more interesting side hobby—if you have a bent in that direction—than the making up of a naturalist's book of specimens. The pastime need not be very arduous, but the collector's satisfaction in getting a new leaf here or a good specimen there is great—so why not give it a try?

The big book in which you keep your collection will, of course, be left at home, but something in which to store the specimens temporarily must be taken with you on the run. Flowers and leaves wither quickly if carried in the hand or if they are exposed for too long periods to a hot sun or drying wind, so the 'something' must be efficient.

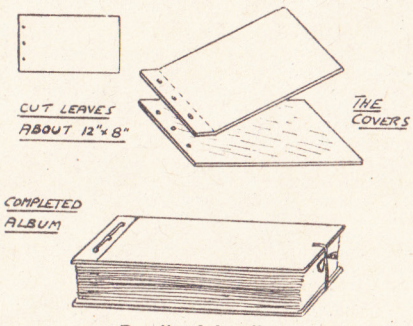
### A Container

A tin box with a tight-fitting lid and some damp moss in is quite serviceable, or an old book can be used, placing the items between the pages. The latter is all right for leaves, but not very satisfactory for bulky flowers, etc. which, apart from anything else, require care in pressing and which may be spoilt by the first incorrect pressure. In these cases a box is better—and this can be quite shallow, and need not take up too much room.

For a general plant collection the best specimens are those which exhibit a leaf and flower together, and the ideal time to collect is just before the flower is full out. Back home, if you have not time to deal with the specimens at once, it is best to put them in water.

The pressing of a specimen needs some little care if it is to be done properly. It is, of course, the squeezing of all the moisture and sap from the stems and petals without destroying the outlines.

Good pressing can only be done fairly slowly. Trying to rush the job only ruins things. Required is some good stiff cartridge paper (which can now be obtained again). The specimens are taken from the water and drained, and the first one laid on the first sheet of paper. Carefully arrange how you want the petals and parts to go and then place another sheet of paper on top. On this sheet can be adjusted a second




Details of the album

specimen. When several layers have thus been made up, place the block on some firm surface where it will not be interfered with, place a board on top, and a weight on this.

Examined after a day, it will be found that only partial pressing has taken place. Carefully remove the specimens, dry out the cartridge papers and restack with a slightly heavier weight. This process may have to be repeated a number of times (according to the type of specimens) before full pressing and drying has taken place.

### Mounting

When ready, the specimens must be mounted in the album that is to be their permanent home. At one time, 'newspaper cutting' books could be obtained fairly cheaply, and made excellent albums for botanical specimens, but now it is best to make your own book, and no handyman will find this difficult.

### Making an Album

Cut several sheets of strong paper of medium wrapping-paper thickness and some pleasing colour. Such papers can be obtained now at most stationers or printers. The size should be about 12ins. by 8ins. At the same time, cut two rectangles of card the same size for the cover and back.

At about 1¼ins. in from the end of each card, score a line with the tip of something blunt, so that the card will bend here without cracking. Now punch three holes in the flap so formed, and also a single hole at the other end to take a fastening tape.

The leaves now are given holes at the ends corresponding with those in the cards, and the album is made up by putting the leaves between the cards and lacing up with a leather or other boot lace. At the further end two tabs are put on and these are tied together in an easily released bow when the book is closed. An album made thus is really loose-leaved and can be built up to almost any size.

### Holding the Specimens

Adhesive paper is the best thing to use for holding the specimens in position and below each should go a neat strip of paper bearing the name. Once pressed and dried, handle specimens only by tweezers or by sliding a thin knife underneath them. (401)

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# Realism in Model Work

THE writer has just been examining some very well made ship models, ancient and modern, and without wishing to be unkind, cannot help remarking that even the model trawlers appear to have golden chains, silver metalwork, and maple dance hall floors for decks.

When shipping lines commission a model they like to have the newness of their ship emphasised. In the case of a model trawler, however, the model-maker would do well to paint on some realistic red rust, etc. and begrime the funnels.

The same applies to models of all descriptions. For example, the underside of a concrete railway tunnel is always black from the smoke of trains. In any length of fencing, it will add to the realism of your model if one or two of the posts or rails are shown broken or otherwise out of place. In model houses where a lot of windows are shown, it will look more natural if appropriate ones are shown cracked, broken, patched or boarded up. In real life many rain gutters are kinked. Again, if one is to include a road in a model, a study of the real thing will soon show that the surface of the road is often marked by patches of oil from standing cars, etc. Sufficient has been shown to emphasise my point.

Old-time ship models should be treated to look antique, in other words, to look as if they were contemporary models. Tins of 'antique' medium are sold, but for a few pence the writer could make far more antique medium than he could ever possibly hope to use in a double life-time. All that is necessary is a little soot from the chimney (only a little!) mixed with paste (either ordinary flour and water paste, or the proprietary makes). This stuff is dabbed on the model with an old brush, working it well in the crevices. After a minute, it is wiped off again with two or three changes of rag.

It is as well to practice on a spare piece of wood first, and, in any case, do not attempt to cover the whole of the ship at once. One should attempt to wipe off in the same way as decorators 'grain' varnished doors, etc. The effect should be of age, not of dirt. As a matter of fact, it is the soot in the air that gradually deposits upon a genuine old model and gives it an antique effect, so this mixture of soot and paste closely approximates Nature's own way. (102)

There will be satisfaction in making this

# STURDY GARDEN SEAT

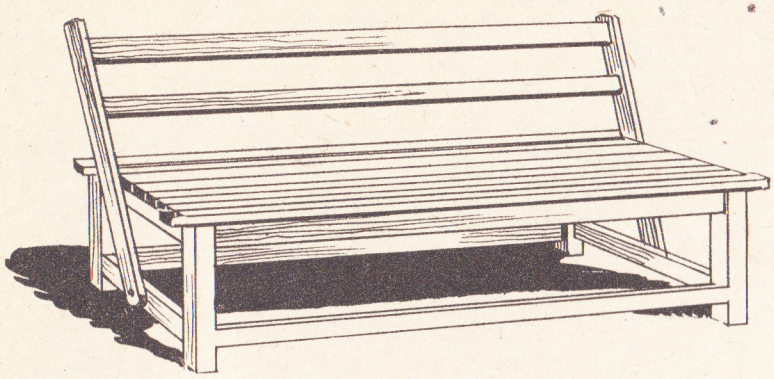

Fig. 1—The completed seat

A GOOD garden seat is almost a necessity to a garden and lawn of any reasonable size. The seat shown in Fig. 1 is so constructed that the back rest is adjustable, being pivoted to a lower side rail so that it can be swung back to suit the direction of the sun. Thus, the full benefit of the sunshine can be felt regardless of what position the seat takes on lawn or garden.

The seat shown in our illustration can be made from white wood. A good straight-grained deal, finished with paint, or even creosote, would make quite a serviceable job and be of attractive appearance.

The constructional work is simple, comprising nothing more than a few simple mortise and tenon joints. These joints, however, need to be carefully set out before the work of chiselling is proceeded with, and here again a set of good tools is needed if clean joints are to be made. All the joints so made should be securely dowelled to make them more resistant to weather conditions.

### The End Frames

The two end frames of the seat should be made first, and for these you require four pieces of 2½in. square wood 17ins. long for the legs. For the bottom rails, two pieces 20ins. long by 2½ins. by 1¾ins. are required, and for the top rails two pieces 20ins. long by 3ins. by 1¼ins. are needed. These latter rails are slightly hollowed towards their middle, as shown in Fig. 2, to make the seat comfortable. This shaping, however, is not compulsory, as cushions are frequently used for such a hard seat.

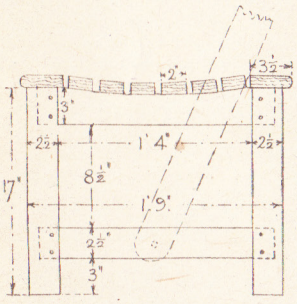


Fig. 2.

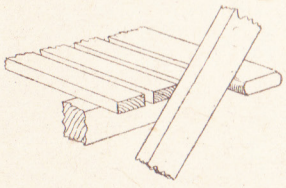

Fig. 4

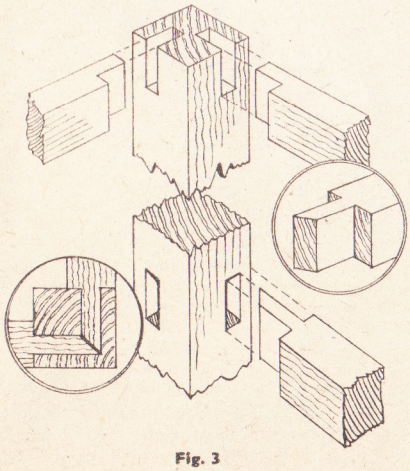

Fig. 3

The joints can now be marked out, and it will be noticed that the tenons on the top rails are on one edge of the wood and extend to half their thickness. The tenons on the bottom rails are one-third the thickness of the wood, and the ends are mitred so that the two tenons fit together in the mortises which meet in the legs (see enlarged details at Fig. 3).


Fig. 5

Mark out the mortises on the legs to correspond with their respective tenons. It will be noticed from Fig. 3 that the upper mortises are made open at the top, these joints being hidden and sufficiently covered by the seating boards, as Fig. 2 shows. In this diagram is shown, too, the lengths between the shoulders on the rails. The joints can now be cut out very carefully with the tenon saw, and mallet and chisel for the mortises. Most of the wood in the latter can be cleaned out by using a brace and bit of the required size and using the chisel for clearing away.

It is advisable to trim out the mortises on the other sides of the legs, which receive the front rails, at the same time. These are exactly the same in size and shape as the others.

The next job is to fit the frames together. With a ¼in. twist bit bore two holes through each joint for the dowels, which may consist of ¼in. round rod pointed at the end and smeared with a mixture of glue and paint to resist the weather.

Cut the ends of the dowels off flush with the frame and clean up with the plane.

### Front and Back Rails

Two top and two bottom rails are now required to fit between the legs along the front and back of the seat.

The top rails are each 3ft. 11ins. by 3ins. by 1¼ins., and the lower rails 3ft. 11ins. by 2½ins. by 1¾ins. The tenons can then be marked out on the ends of these rails similar in size and shape to those on the end rails, the distance between the shoulders this time being 3ft. 7ins. The lower rail tenons must be mitred as before to fit in the mortises.

When all the joints have been cut and fitted, the tenons can be painted and the dowels driven through the legs into them as explained before.

The next job is to fix the top slats on the assembled frame. For these obtain two pieces of wood 4ft. 3½ins. long by 3½ins. by 1in. for the outside slats (see Fig. 2) and six pieces, each 4ft. by 2ins. by 1in., for the intermediate ones. One edge of each outside slat must be rounded with a smoothing plane, and it is advisable to glasspaper the corners off the remaining slats to remove any splinters, etc.

The best way to fix the slats to the frame is shown in Fig. 6. A hole is bored through the wood where the screws are to go and the tops are then countersunk deeply. The screws are then

Fig. 6

(Continued at foot of page 411)


*A review of interesting books for craftsmen which have been recently published. Obtainable through newsagents or booksellers or direct from the publishers mentioned.*

## Concrete, Stone & Brickwork

by Noel D. Green

THE home handyman who wishes to undertake successfully a variety of outdoor constructional work in concrete, stone or brick, should secure a copy of this latest addition to the Home Mechanic Series. Introductory chapters explain the various types of concrete mixes and the methods of mixing, and simple instructions are given for the types of work that can make so much difference to a garden—laying crazy paving, constructing garden edging, paths, balustrade columns, bird baths and aquariums. Chapters for the more ambitious worker are also included, and give practical instruction for the construction of reinforced structures such as fences, coal bunkers, garages and greenhouses. Masonry and brickwork are thoroughly dealt with in the final chapters.

*Published by Newnes and Pearson Ltd., Southampton Street, Strand, London, W.C.2—Price 5/-*

* * *

## Your Children's Crafts

Edited by E. Sheila MacEwan

THERE are many books on children's crafts, but this is one with a difference. It is planned throughout for children old enough to read instructions and follow simple diagrams for themselves, and avoids, as far as possible, the manner of the school textbook. Then again, it is not just another book on how to make something useful. The crafts—hand and glove puppets, modelling and carving, paper model making, print making, wooden toy making and weaving—are described rather as a media of artistic expression, and to encourage children to use, in an imaginative way, odds and ends of materials ready to hand.

*Published by The Sylvan Press Ltd., 24 Museum Street, London, W.C.1—Price 9/6*

* * *

## Make Your Own 'O' Gauge Motor

by E. F. Carter

THERE can be few railway modellers who have not read something from the pen of Mr. Carter, and few who have not profited from such reading. This latest book will prove a valuable asset to those of our readers who own 'O' gauge layouts, for are not numbers of us often deterred from constructing another locomotive body, simply because we cannot afford to buy the motor it will need before it can take its place among the rest of our locos? By following the instructions in the book, a sturdy and reliable unit can be made for a fraction of the cost of a manufactured one, and for the man who contemplates putting a new loco on his layout, the book will be a profitable investment. For anyone faced with the problem of completing a number of locos to build up his stock, the book is indispensable.

*Published by Percival Marshall & Co. Ltd., 23 Gt. Queen Street, London, W.C.2—Price 3/6*

* * *

## Pewter Relief Modelling

By Zita Dundas

FOR anyone wishing to acquaint themselves with the craft of relief modelling in pewter, Miss Dundas' book can be recommended. Pewter work in a general sense is, of course, a highly specialised craft calling for skilled technical training, but pewter relief work in itself is a handicraft which requires few tools and can be practised by anyone. The book is easy to understand and well illustrated, and the illustrations include a number of designs which should offer no difficulty to the beginner.

*Published by Vawser & Wiles (London) Ltd., 356/358 Kilburn Road, London, N.W.6—Price 2/6*

* * *

## Home Carpentry

By W. A. G. Bradman

HERE is a book for the amateur woodworker, a book which sets out to provide a concise instruction course of real worth to the beginner. The chapters deal with such things as the tool kit, woodwork joints (explained stage-by-stage in text and pictures), fittings, cabinet drawers and doors, veneering, and staining and polishing. In addition, there is a section on six things to make.

*Published by W. & G. Foyle Ltd., 119/125 Charing Cross Road, London, W.C.2—Price 2/6*

* * *

## Rope Splicing

By P. W. Blandford

IN this book an attempt has been made to gather descriptions of all kinds of rope splices into one volume—and a very handy volume it thus turns out to be. For while there are many excellent books on knotting and general ropework, and which include splicing in their contents, they cannot hope to treat the subject as fully as one devoted solely to splicing. So that the reader who wants to know about this particular subject alone cannot do better than secure a copy of Mr. Blandford's book. It is comprehensively illustrated, and altogether good value for money.

*Published by Brown, Son & Ferguson Ltd., 52/58 Darnley Street, Glasgow— Price 3/6*

* * *

## Modern Furniture Projects

By W. A. G. Bradman

FOR the amateur woodworker who is setting up home, or who needs additional pieces, this is a book that can be wholeheartedly recommended. It is assumed, of course, that the reader has the essential pieces, and the articles concentrated upon are, for the most part, of the smaller variety such as stools, lounge tables, etc.; but larger pieces are not altogether neglected, and there are drawings and instructions for making divans, a sideboard, etc. A chapter on joints caters specially for the reader of limited woodworking experience, and he need not fear that the subsequent designs will be too difficult for him. The designs themselves are modern, pleasing to look at—and useful.

*Published by Herbert Jenkins Ltd., 3 Duke of York Street, London, S.W.1—Price 7/6*

* * *

## Aeromodeller Annual 1950

Compiled by D. J. Laidlaw-Dixon; edited by D. A. Russell, M.I.Mech.E.

ONCE again comes this now old friend to mark the passing of another aeromodelling year. It gives, as usual, a detailed review of the year's aeromodelling throughout the world in theory and practice, and is full of useful data and authoritative articles produced by the staff and contributors of the Aeromodeller. The popular plans section has been not only retained, but enlarged, and several new countries are represented. In all, the annual offers sound value for money to all who make and fly model aircraft.

*Published by the Model Aeronautical Press Ltd., Allen House, Newarke Street, Leicester—Price 7/6*

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**Bedside Lamp and Clock**—(*Continued from page 407*)

Leave a sufficient length of flex to connect to the source of supply; about 2yds. is usually enough but this will depend on individual requirements.

The bottom board can now be fixed on with a few ½in. screws, and if desired a piece of thin felt can be glued on to prevent scratching the furniture.

Choice of shade is left to the reader; there is an endless variety on the market now, or it is not a difficult job to make one. (388)

## Good news for amateur photographers—

# 'P.O.P.' IS HERE AGAIN

'PRINTING-OUT' photographic paper, generally called P.O.P., is back on the market after its long absence due to the war. This is excellent news for the amateur camera man, for making prints with this kind of paper is very easy, no darkened or semi-darkened room being necessary as with bromide or gaslight papers. Also, when watching a P.O.P. print come into being there is an interest that seems absent with other developing papers.

With the daylight paper, the negative is placed in the frame with a sheet of the material behind, exposure to daylight then being made. The frame must not be placed in the full sun, and the making of the print is quite a leisurely job. After the frame has been out for a little time take it into the greater shade of, say, a doorway, undo half the back and gently lift the paper from the negative. At once you will see that the picture has arrived, though as yet it may not be dark enough.

### The Correct Depth

The picture has, of course, been produced by the action of the sunlight through the negative and the longer it is left in the light the darker it will go. The correct depth to aim at is just a little deeper than you require the final picture to be, as the print will lighten in the 'fixer', some brands more than others.

Although there is an almost irresistible urge to get a really good long peep at your latest snapshot, do not keep the half back up for too long, as the light in the doorway may be brighter than you had imagined and the paper will start to darken all over, which will spoil the sheet. After just a very brief look, therefore, close the half back down carefully, re-clip and, if necessary, place the frame back in the sun. With a little practice you will be able to get the desired depth of printing without too many inspections.

Having completed the printing, remove the sheet and put it in the envelope in which the paper arrived (and which is quite light-tight) till you are ready to do the fixing. The usual thing is to print quite a number of negatives and then fix the prints altogether. However, try with single prints at first until you get your hand in.

### The Two Types

Printing-out papers all give a brown picture and there are two types of the material, the 'ordinary' and 'self toning'. Both are 'fixed' by placing in hypo, but whereas the 'self-toning' turns to a rich sepia in plain hypo, the 'ordinary' has to be placed first in a 'toning bath' to get the same effect. Treatment with hypo will certainly fix the ordinary papers without the toning solution, but the final colour is not too nice, being reddish and devoid of the rich depth of true sepia.

If there are special instructions necessary for the using of any particular brand of P.O.P. these are usually enclosed in the packet, but generally the prints are first rinsed in plain water for a few minutes and put straight into hypo which has been made up to a strength of roughly 1oz. of the hypo crystals to 10ozs. of water. In here the prints slowly change to a deeper and deeper sepia, at the same time slightly lightening. Ten minutes in this bath is sufficient, and then the prints are washed for half-an-hour in running water. That the water must be running *over* the prints is important.

The 'ordinary' type of paper is first rinsed and then placed in the 'toner' which can be bought in small packets from any dealer. The prints stay here for about 5 minutes, being kept on the move and in a shady place, and are then put in a hypo solution as before.

Printing-out papers can be dried naturally by laying out on clear blotting paper, but the glossy types 'glaze' exceptionally well; that is, they can be given a super high gloss by placing face down on a sheet of glass when wet. The prints are taken straight from the washing water and put quickly on to the glass. A piece of clean blotting paper is then placed over their backs and they are pressed into tight contact with the smooth surface, either with a squeegee roller or by pulling some flat edge (e.g. a ruler) over the blotting paper which is firmly held meanwhile so that the prints do not slip. The aim is to expel all air from between the print and glass.

The glass is now put on one side, and as the prints dry they peel off with a depth of gloss that is quite impossible by straight drying. Should they stick at all it is because the glass has not been absolutely clean. Stuck prints, however, can be soaked off, and reglazed when the glass has been given another polish. French chalk makes an excellent grease-removing and polishing agent.

### Unfixed Prints

P.O.P. is useful also to the photographer who mainly uses gaslight or other developing papers, as it allows him to see in a few moments what he has really got on his negative. In fact, some years ago it was much used by professional photographers for 'proofs'. While unfixed P.O.P. prints cannot be looked at for too long in daylight without browning in, they can be examined for any length of time by artificial light without damage.

One final point. The best P.O.P. prints are obtained from fairly strong, contrasty negatives, and these can be obtained by developing the film for a rather longer time than usual. A little experimenting will soon show you the best class of negative for this extremely handy paper. (400)

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**Sturdy Garden Seat**—(*Continued from page 409*)

driven in and the heads filled with putty or other suitable filling. This covering prevents the screws from rusting. Two screws driven in each end of each slat is sufficient if a piece of odd wood is screwed across the middle of the slats on the underneath side to make everything rigid. Screw the two outside slats on first, and notice in Fig. 4 that they are 1¾ins. longer than the seat at each end—to receive the back rest. The intermediate slats must also be longer than the top rails of the seat frame, but level with the edges of the legs. These slats are spaced out carefully between the front and rear wide slats.

### Making the Back Rest

For the back rest, obtain two side uprights about 3ft. 3ins. long by 3ins. by 1¼ins., and two horizontal rails 4ft. 3ins. by 1¼ins. Mark out the mortise and tenon joints as shown in Fig. 5. The tenons are ⅓rd the thickness of the rail and pass right through the uprights. Cut these and fix them as before, by gluing and painting and then dowelling. It is better to round the ends of the uprights and plane all the corners off before fixing together as above. Next obtain two 4ins. by ½in. bolts, with nuts and washers complete, then put the back rest in position so that the bottom of the uprights fit the lower rails of the frames as in Fig. 2. First, however, bore holes centrally in the rails to receive the bolts. The back rest should move freely against the slats of the seat. Any clearance needed can be arranged by adding washers on the bolts.

The completed seat may be oiled, painted or creosoted, the bottom of the legs being coated with tar, or thoroughly saturated with the creosote.


# MARCH MEMORIES

IT would appear that the merry month of March is an important one for philatelic commemoratives, either births or deaths. If we go through the diary we find that on March 3rd Alexander Graham Bell was born. You can see his portrait on either the 10c. of the United States set of famous inventors issued in 1940 or else on the 4c. Canadian stamp which was issued in 1947 to commemorate the centenary of his birth in 1847 in Edinburgh. He went to Canada from Scotland when he was twenty-three. He became professor of vocal physiology at Boston University and specialized in teaching the deaf and making aids for those who had difficulty in hearing, and it was from his researches into this that he developed his idea for a telephone which he invented in 1876. It is for this invention that we mainly remember him. He died in 1922.

On March 6th, 1945, Cologne was captured. We do not suggest that this is a birthday, of course, but it is quite a notable date, and Cologne Cathedral appears on the 1923 German stamp of 10,000 mark value. The cathedral is the most noted building in the city, but we must not forget that it is also an important manufacturing town, cotton and woollen goods, scent, machinery, and chemicals being the chief products. It was the headquarters of the British Army of Occupation from 1918 to 1926.

### Masaryk

Thomas Masaryk was born on March 7th, 1850, and his portrait appears on many of the Czechoslovakian stamps. He founded the progressive Czech Party in 1889, and strongly opposed the pro-German influence in Austria, so that he had to leave his country when the 1914 war broke out. But after the war he became the first President of Czechoslovakia. Many and varied are his portraits, the most pleasing being, undoubtedly, the child welfare stamp of 1938, which shows Masaryk holding up a small child in a very happy mood.

On March 12th, 1925, Sun Yat Sen died in Peking, he was born in 1867 and was the founder and first President of the Chinese Republic as well as the first graduate in medicine at Hong Kong in 1892. He played a large part in the revolution of 1911, and the next year he was elected President of the Southern Provinces, but soon resigned. His portrait first appears on the 1912 set. Then he appears on the stamps of 1931 and 1938 and then each succeeding year from 1941, so that you should not have any difficulty in finding a good picture.

### Karl Marx

On March 14th, 1883, Karl Marx died and was buried in London. He was born in Prussia and went to the University, where he became the editor of a paper which was suppressed. This was in 1843, the same year in which he was married and went to Paris where he did much work on Socialism. Later, he founded the Communist League and in 1848 issued the Communist Manifesto. He was banished from Germany and came to London, where he lived in great poverty. The 50th anniversary of his death was commemorated by Russia in 1933. She issued three stamps, showing respectively: a view of Treves, his birth place, on the lowest value, with a small medallion portrait of Marx; a picture of Karl Marx's grave in Highgate cemetery (middle value); a portrait of Karl Marx (highest value).

The 20th of the month is the anniversary of the birth of Henrik Ibsen, who was born in 1828. He was a Norwegian playwright and poet whose works can be divided into three groups—first, historical dramas, mostly in verse; secondly, poetical fantastic plays of which 'Peer Gynt' is probably the best known; and thirdly, satirical dramas written in prose dealing with social conduct. He died in 1906, and is commemorated on the stamps of Norway by a set of four issued in 1928 showing his portrait and also his signature.

### The 'G's

The last three of the month's commemoratives are all 'G's—Goethe, Goya and the Duke of Gloucester. Goethe died in 1832, and his portrait appears on the two values 3 pf. and 25 pf. of the 1926 issue of famous Germans. Born in 1749, Johann Wolfgang Goethe studied at Leipzig and at Strassburg, and many of the plays he wrote met with immediate success. His most noted, 'Faust', was published in 1831. He was a scientist of no mean standing but this is completely overshadowed by his fame as a writer.

Goya was born on March 30th, 1746, and studied art for a time at Saragossa. He later went to Madrid, and at the age of 19 he was travelling with a troupe of bullfighters into Italy. There he again took up art and later became the Court painter in Spain. As could be expected from his intimate knowledge of bull fighting, his etchings on this subject were masterly. His portrait and three of his paintings appear on the 1930 set from Spain. He died in 1828, aged 82.

March 31st is the birthday of the Duke of Gloucester, who was born in 1900, the third son of H.M. King George V. In 1935, he married Lady Alice Montague Scott, his portrait, together with that of the Duchess, is on the 1945 issue of Australia during the time that he was Governor-General.

Newfoundland has always been noted for the portrait stamps that she has produced, and on the 1911 set the Duke of Gloucester appears on the 6c. stamp.

(399)


Canadian 4c. stamp showing portrait of Alexander Graham Bell


Russian stamp with picture of Karl Marx and his grave in Highgate cemetery


Goya pictured on a Spanish stamp


Portraits of The Duke and Duchess of Gloucester on an Australian 2½d. stamp issued in 1945

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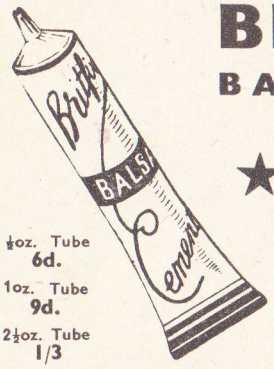


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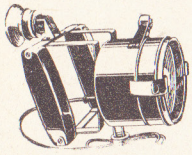

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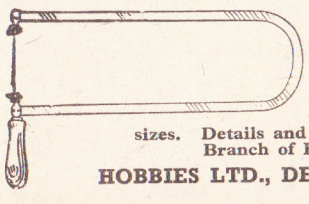

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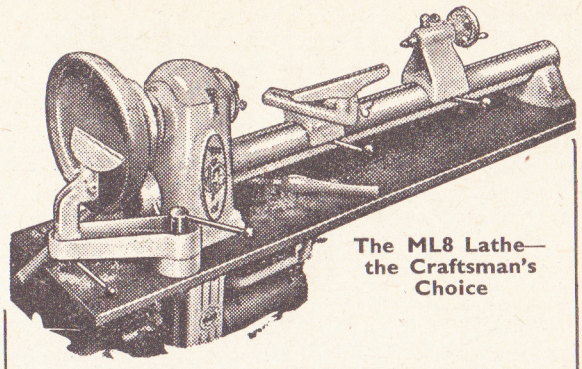

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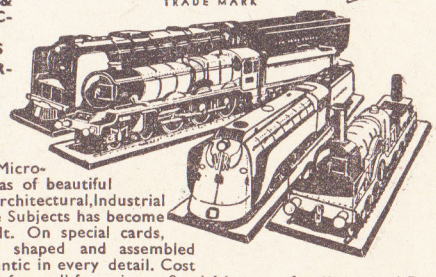

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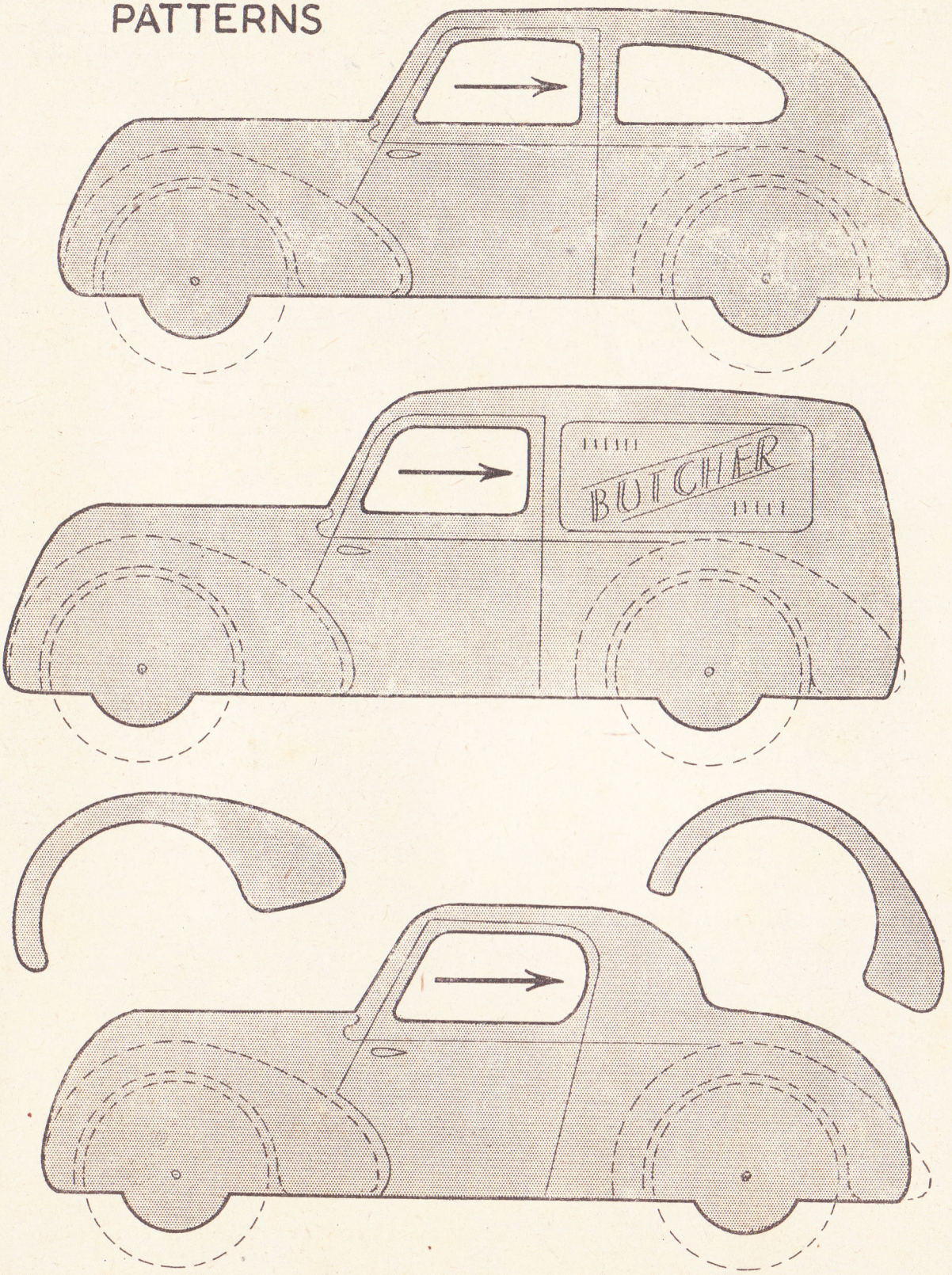

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